



Chicago Metropolitan Agency for Planning

233 South Wacker Drive
Suite 800, Sears Tower
Chicago, IL 60606

312-454-0400 (voice)
312-454-0411 (fax)
www.chicagoareaplanning.org

CMAQ Project Selection Committee Meeting

Annotated Agenda

September 6, 2007

Cook County Conference Room
233 S. Wacker Drive, Suite 800, Sears Tower
Chicago, Illinois

Note: the meeting materials can be found at <http://www.chicagoareaplanning.org/cmaq/min-cmaq.asp>

- 1.0 Call to Order and Introductions** 10:00 a.m.
Patricia Berry, Committee Chair
- 2.0 Agenda Changes and Announcements**
- 3.0 FY 2008 CMAQ Program**
 - 3.1 FY 2008 -2010 CMAQ program marks
The marks will be discussed.
 - 3.2 Comments on Proposed FY 2008 CMAQ program
A summary of the comments received and staff notes on those comments will be presented and discussed.
 - 3.3 FY 2008 CMAQ Program Recommendation to Transportation Committee
- 4.0 Project Changes**
 - 4.1 Kane County DOT – Fabyan Pwy and Western Ave (TIP ID 09-05-0004)
The sponsor requests a cost increase.
 - 4.2 Addison – Mill Rd Bridge Sidewalk Project (TIP ID 08-06-0052)
The sponsor requests a cost increase and scope change.
 - 4.3 Justice – IL 171/Archer Ave Sidewalk From Cork Dr to 71st St (TIP ID 06-02-0002)
The sponsor requests a minor scope change.
- 5.0 Project Monitoring**
The status of active project monitoring will be discussed.
- 6.0 Other Business**
- 7.0 Public Comment**

This is an opportunity for comments from members of the audience. The amount of time available to speak will be at the chair's discretion. It should be noted that the exact time for the public comment period will immediately follow the last item on the agenda.

8.0 Next Meeting

The next meeting will be scheduled prior to the call for FY 2009 CMAQ proposals.

9.0 Adjournment

CMAQ Project Selection Committee Members:

____ Patricia Berry, Chair	____ Les Nunes	____ Jeff Schielke
____ Martin Buehler	____ Mark Pitstick	
____ Luann Hamilton	____ Mike Rogers	

Attending CMAQ Project Selection Committee Meetings at Sears Tower:

CMAQ Project Selection Committee meetings are public meetings; the public is invited to attend. Passes are available for people attending these meetings at the CMAP offices. If you wish to attend but have not attended meeting regularly, please call or e-mail Ross Patronskey (312-386-8796, rpatronskey@cmap.illinois.gov) in advance to be added to the list. For requests or problems on the day of the meeting, please call the CMAP main reception desk at 312-454-0400. A driver's license, state ID, or passport will be required to enter.



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Memorandum

To: CMAQ Project Selection Committee
From: Ross Patronskey, Senior Planner
Doug Ferguson, Associate Planner
Subject: Public Comments on proposed FY 2008 CMAQ Program
Date: August 30, 2008

The following is a summary of the comments received on the proposed FY 2008 CMAQ program and staff notes on those comments. Eleven comments were received, ten on specific proposals. One comment was received on the CMAQ program in general. Copies of the individual comments are attached.

CP12082919 – Joliet – Joliet Metra Lot 1 at Washington St

Lawrence Walsh, Will County Executive, sent a letter supporting the proposal.

James Glasgow, State's Attorney of Will County, sent a letter supporting the proposal.

Russ Slinkard, President of the Joliet region Chamber of Commerce, sent a letter supporting the proposal.

Pat McGuire, Will County Treasurer, sent an e-mail supporting the proposal.

- This proposal is included in the proposed program.

II12082953 – Will County Department of Highways – Laraway Rd at Cedar Rd

Lawrence Walsh, Will County Executive, sent a letter supporting the proposal.

- This proposal is included in the proposed program.

II12082952 – Will County Department of Highways – Laraway Rd at Wolf Rd

Lawrence Walsh, Will County Executive, sent a letter supporting the proposal.

- This proposal is included in the proposed program.

TI08082841 – Pace – College of DuPage Connector-Year 2

Kenneth P. Johnson, President, DuPage Mayors and Managers Conference/Mayor, City of Wood Dale, sent a letter supporting the proposal.

- This proposal is included in the proposed program.

BP12082888 – Forest Preserve District of Will County – I-355 Corridor Trail

Deborah Fagan, DuPage County, sent a letter supporting the proposal and requests that the Project Selection Committee re-examine its program guidelines and project ranking criteria.

- This proposal is not included in the proposed program. A total of 33 bicycle facility projects were submitted for consideration and this project ranked 29th for dollar per ton of VOC eliminate. The proposed program includes fifteen bicycle facility projects.

CMAQ Proposed Program

Jan Madia sent an email recommending that more bike lanes and traffic islands with plants be considered.

- The proposed program includes fifteen bicycle facility projects. Traffic islands by themselves are not eligible for CMAQ funds.

OT01082843 – Chicago Public Schools – Chicago Public Schools School Bus Retrofit

Brendan Daley, Deputy Commissioner, Chicago Department of Environment, sent an email supporting the proposal.

- This proposal is included in the proposed program.

OT01082843 – Chicago Public Schools – Chicago Public Schools School Bus Retrofit

OT07082844 – Riverdale – CSXT Barr Rail Yard Switch Engine Retrofit

OT01082826 – CDOE – Chicago Diesel Fleet Retrofit Project - Phase II

OT01082835 – CTA – Bus Cold Start Devices - Year 2

Anna Frostic, Respiratory Health Association of Metropolitan Chicago on behalf of the Illinois Campaign to Clean up Diesel Pollution along with 47 co-signatories, sent a letter supporting the proposals and in general diesel retrofits that reduce PM emissions.

- The proposals are included in the proposed program.

302 N. Chicago Street
Joliet, Illinois 60432



(815) 774-7480
Fax (815) 740-4600

Lawrence M. Walsh
Will County Executive

August 22, 2007

Mr. Ross Patronsky
Chief of CMAQ Program
Chicago Metropolitan Agency for Planning
233 S. Wacker Drive, Suite 800
Chicago, IL 60606

Subject: *Joliet Metra Lot 1 CMAQ Submittal*

Dear Mr. Patronsky,

I am writing to express my strong support for the Joliet Metra Lot 1 CMAQ submittal. As you know, Joliet is the fastest growing City in Illinois and one of the fastest in the U.S. The City currently has 9 Metra lots that are at 100% capacity each day Monday through Friday. The Metra Lot 1 project at Washington Street will provide an additional 45 parking spaces which are also expected to be at 100% capacity everyday. Based on this information, you can see that additional lot space is needed greatly.

The current inadequacy of commuter parking in Joliet forces potential Metra riders to either drive to another train station outside the City or to drive all the way to their destination. Both of these scenarios are bad for air quality in our region and are frustrating to citizens who pay taxes to support transit service but who can't commute by train simply because of a parking situation. Your support on this CMAQ submittal would be greatly appreciated as the Metra Lot 1 project will provide a very positive return in air quality benefits and is a good use of federal dollars. Should you have any questions, please feel free to contact me.

Sincerely,

Lawrence M. Walsh
Lawrence M. Walsh

Cc: James P. Shapard, City of Joliet

**JAMES W. GLASGOW**

STATE'S ATTORNEY OF WILL COUNTY

Will County Court Annex

57 North Ottawa Street 6th Floor, Joliet, Illinois 60432

815-727-8453

August 23, 2007

Mr. Ross Patronsky
Chief of CMAQ Program
Chicago Metropolitan Agency for Planning
223 S. Wacker Drive, Suite 800
Chicago, IL 60606

Subject: Joliet Metra Lot 1 CMAQ Submittal

Dear Mr. Patronsky,

I am writing to express my strong support for the Joliet Metra Lot 1 CMAQ submittal.

For the third consecutive year, Joliet was the fastest growing city in Illinois and remained one of the fastest-growing in the country, as reported by the Chicago Tribune on June 28, 2007. Joliet added more than 35,000 people between 2000 and 2006, more than any other city in the state. Joliet's one-year population jump of 6,500 residents between 2005 and 2006 also was tops in the state.

The city currently has nine Metra lots that are at 100% capacity each day during the work week. The Metra Lot 1 project at Washington Street will provide an additional 45 parking spaces. These additional spaces are expected to be at 100% capacity everyday as well.

While celebrating the city's recent growth and successes, city leaders realize that the inadequate commuter parking in Joliet forces potential Metra riders to either drive to another train station outside the city or to drive all the way to their destination. Both of these options are frustrating to tax-paying citizens who cannot commute by train simply because of a parking situation. Additionally, these options are bad for air quality in our region.

Your support of the Joliet Metra Lot 1 project would be greatly appreciated. Should you have any questions, please feel free to contact me.

Sincerely,



James W. Glasgow
Will County State's Attorney

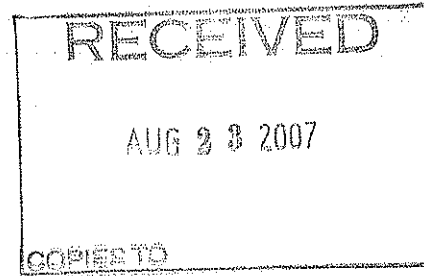
JWG/cj



joliet region

CHAMBER of COMMERCE & industry

August 21, 2007



Mr. Ross Patronsky
Chicago Metropolitan Agency For Planning
233 South Wacker Drive Suite 800
Sears Tower
Chicago, IL. 60606

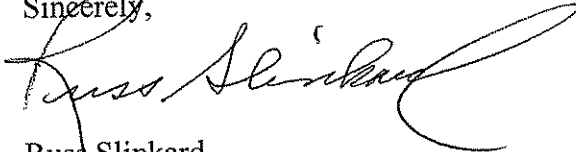
Dear Mr. Patronsky:

Joliet City Center has a serious shortage in available parking spaces for shoppers, business employers and employees, and for the nearly 5,000 commuters who take Metra into the City and other Metropolitan locations for employment on a daily basis. Our Chamber Board of Directors, earlier this year, approached the City of Joliet to address this problem. Our member businesses feel strongly that the situation has reached the point of being a crisis. The lack of off-street (and severely limited on-street) parking is a restriction on further development, and on commuter use of transportation, in the City.

I have been advised that the City of Joliet has proposed construction of a commuter parking lot on Washington Street, referred to as JOLIET METRA LOT 1, and has requested IDOT Congestion Mitigation Air Quality (CMAQ) funding for this project. Our Chamber Board of Directors, along with our 1,600 members supports this request based on immediate need, and asks your favorable consideration of the City of Joliet request.

Please feel free to call me if you need additional information.

Sincerely,



Russ Slinkard
President & CEO

Ross Patronsky

From: Amy Talbot
Sent: Monday, August 20, 2007 4:43 PM
To: Ross Patronsky
Subject: CMAQ

-----Original Message-----

From: Pat McGuire [mailto:patmcguire@willcountyillinois.com]
Sent: Friday, August 17, 2007 5:09 PM
To: Info
Cc: jshapard@jolietcity.org; Larry Walsh
Subject: CMAQ Comments

July 17, 2007

Dear Mr. Patronsky,

I am writing in support of Joliet Metra Lot 1 in the competition for Congestion Mitigation Air Quality Funds. This lot would increase the appeal to Joliet-area residents of taking Metra to Chicago, thereby improving air quality and reducing congestion--and improving safety--on Interstate 55 and other highways to Chicago.

In my role as Will County Treasurer, I am acutely aware of the need for more parking in downtown Joliet. Taxpayers drive to the Will County Office Building in droves when property taxes are due. County Executive Larry Walsh and I have worked to have county employees park somewhere other than the county parking lot so spaces in the county lot are available to taxpayers, especially senior citizens and persons with disabilities. However, it is nearly impossible for county employees to find street parking, and nearby parking decks are full. Joliet Metra Lot 1 would improve this situation.

Sincerely,

Pat McGuire
Will County Treasurer
Will County Office Building
302 N. Chicago St.
Joliet, IL 60432
(815) 740-4685
patmcguire@willcountyillinois.com <mailto:patmcguire@willcountyillinois.com>
www.willcountytreasurer.com <http://www.willcountytreasurer.com>

302 N. Chicago Street
Joliet, Illinois 60432



(815) 774-7480
Fax (815) 740-4600

Lawrence M. Walsh
Will County Executive

August 22, 2007

Mr. Ross Patronsky
Chief of CMAQ Program
Chicago Metropolitan Agency for Planning
233 S. Wacker Drive, Suite 800
Chicago, IL 60606

Subject: *Will County Laraway Road at Cedar Road CMAQ Submittal*

Dear Mr. Patronsky,

This letter is being sent to express my full support for the Laraway Road at Cedar Road CMAQ application submitted by the Will County Department of Highways. Due to rapid commercial, industrial and residential development in and around the Village of New Lenox over the last decade, traffic through this intersection has increased tremendously with ADT on each segment of the intersection reaching highs of 12,700 and 6,700 respectively. Rural traffic standards are no longer sufficient for safe and efficient traffic movement through this intersection. Both Laraway Road and Cedar Road require widening to provide for 4 way left turn lanes and a fully-actuated traffic signal.

This intersection meets Warrant 1 of the Manual on Uniform Traffic Control Devices (MUTCD). Due to the large volumes of intersecting traffic at this location it is easy to see that widening for exclusive left turn lanes and signalization at this intersection will improve the flow and safety of intersecting traffic, thereby improving air quality. I ask for yours and the CMAQ Committee's support on this project.

Sincerely,

Lawrence M. Walsh
Lawrence M. Walsh

Cc: Sheldon Latz, Will County Department of Highways

302 N. Chicago Street
Joliet, Illinois 60432



(815) 774-7480
Fax (815) 740-4600

Lawrence M. Walsh
Will County Executive

August 22, 2007

Mr. Ross Patronsky
Chief of CMAQ Program
Chicago Metropolitan Agency for Planning
233 S. Wacker Drive, Suite 800
Chicago, IL 60606

Subject: *Will County Laraway Road at Wolf Road CMAQ Submittal*

Dear Mr. Patronsky,

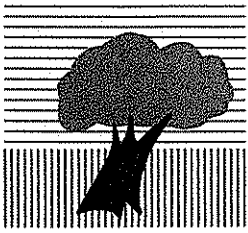
This letter is being sent to express my full support for the Laraway Road at Wolf Road CMAQ application submitted by the Will County Department of Highways. Due to rapid development in and around the Village of New Lenox over the last decade, traffic through this intersection has increased tremendously with ADT on each segment of the intersection reaching highs of 11,100 and 7,200 respectively. Rural traffic standards are no longer sufficient for safe and efficient traffic movement and this intersection now requires a fully-actuated traffic signal.

This intersection meets Warrant 1 of the Manual on Uniform Traffic Control Devices (MUTCD). Due to the large volumes of intersecting traffic at this location it is easy to see signalization at this intersection will improve the flow and safety of intersecting traffic, thereby improving air quality. I ask for yours and the CMAQ Committee's support on this project.

Sincerely,

A handwritten signature in cursive script that reads "Lawrence M. Walsh".
Lawrence M. Walsh

Cc: Sheldon Latz, Will County Department of Highways

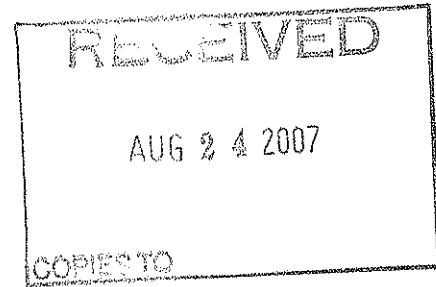


DUPAGE MAYORS AND MANAGERS CONFERENCE

an association of municipalities representing 1,000,000 people

1220 Oak Brook Road
Oak Brook, Illinois 60523
(630) 571-0480
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www.dmmc-cog.org

Founded June 19, 1962



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Villa Park
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Wayne
West Chicago
Westmont
Wheaton
Willowbrook
Winfield
Wood Dale
Woodridge

August 20, 2007

Ross Patronskey, Chief of CMAQ Program
Chicago Metropolitan Agency for Planning
233 South Wacker Drive, Suite 800, Sears Tower
Chicago, IL 60606

Dear Mr. Patronskey:

I am writing to convey the strong support of the DuPage Mayors and Managers Conference (DMMC) for the *College of DuPage Connector – Year 2* (TIP # 08-08-2841). This application was submitted by Pace as part of the FY 2008 Congestion Mitigation and Air Quality Program.

The COD Connector is an excellent project to receive these funds for three key reasons that support the goal of reducing congestion and improving air quality:

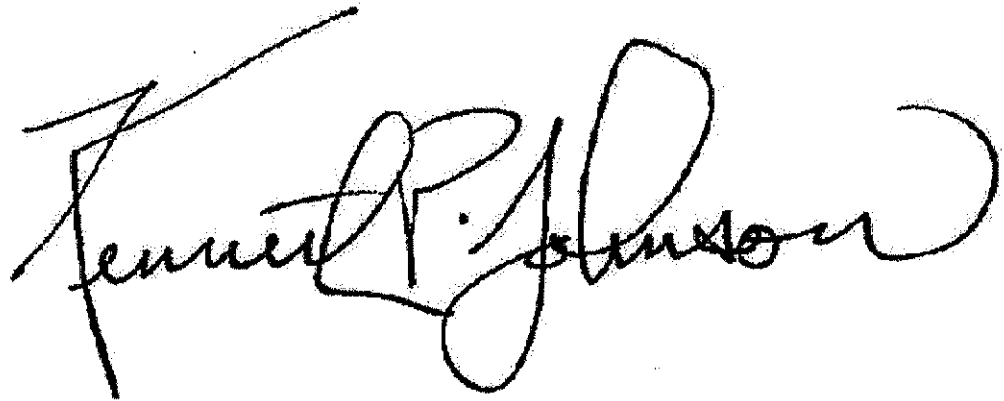
Who It Serves: The COD Connector provides needed bus service between Wheaton and Naperville, with direct service to the College of DuPage. It also serves the Illinois Institute of Technology (IIT) and offers the first public transit access to Danada Square, a major shopping center on Butterfield Road. When Wheaton, Naperville, and County officials launched the inaugural ride on August 2, 2006, the COD Connector became the first project to be implemented as part of the *DuPage Area Transit Plan*. This route is also critical to DuPage County's overall transit system. It directly links the UP-W and BNSF lines, as well as numerous Pace routes that serve the Wheaton and Naperville stations, creating new transfer opportunities to existing transit services.

How It Serves Them: This route represents a unique and successful collaboration. Pace has worked to empower the COD Connector Team – a broad-based partnership comprised of leaders from Pace, Naperville, Wheaton, DuPage County, RTA, Metra, COD, IIT, and DMMC – to assist in reviewing operations, marketing, and shaping the future of this vital route. This community-based approach has built a strong foundation of local support and an effective vehicle for raising transit awareness among DuPage municipalities. Pace been an excellent steward of the Year 1 CMAQ grant, and the Team looks forward to continuing this relationship with Pace in Year 2 of the project.

Proven Results In Under One Year: The COD Connector Team successfully used Year 1 CMAQ funding to design and implement a route in about one year that successfully engaged the public and other stakeholders. As a direct result, the route was able to reach a daily ridership of 250 after only nine months. The Team's goal is to reach 350 in October 2007 and 500 in 2008. By comparison, other routes often take 2-3 years to mature.

In closing, I'd like to underscore our commitment to the COD Connector project and our support for Pace's CMAQ application to operate the route in Year 2. If you need further assistance, please contact Tam Kutzmark, DMMC's Transportation and Planning Director, at 630.571.0480 ext.228, or tkutzmark@dmmc-cog.org.

Sincerely,

A handwritten signature in black ink, reading "Kenneth P. Johnson". The signature is fluid and cursive, with a large, stylized "K" and "J".

Kenneth P. Johnson
Mayor, City of Wood Dale
President, DuPage Mayors and Managers Conference



**DU PAGE COUNTY
ECONOMIC DEVELOPMENT & PLANNING**

Robert J. Schillerstrom, County Board Chairman

ECONOMIC DEVELOPMENT ♦ WORKFORCE DEVELOPMENT ♦ BUILDING & ZONING ♦ STORMWATER PERMITTING
WETLANDS PROTECTION ♦ TRANSPORTATION PLANNING ♦ TRANSIT PLANNING ♦ LAND USE ♦ TRAILS

421 N. County Farm Road
Wheaton, IL 60187

(630) 407-6700 Phone
(630) 407-6702 Fax
www.dupageco.org/edp

August 21, 2007

Mr. Ross Patronskey, Chief
CMAQ Program
Chicago Metropolitan Agency for Planning
233 South Wacker Drive, Suite 800
Chicago, Illinois 60606

Re: Comments on CMAQ Project Selection Criteria and I-355 Extension Trail

Dear Ross:

The purpose of this letter is to request the CMAQ Program consider revising the project selection criteria for regional projects connecting multiple counties.

The development of the forest preserve system in northeastern Illinois has resulted in location of many forest preserves on lands with significant environmental constraints and little opportunity for intense land use development. Protecting these environmentally sensitive areas, frequently located along river valleys, helps fulfill the mission of the forest preserve system.

At the same time, over the last five decades, the region has used open space as a growth management tool to delineate and define development zones. These development zones have resulted in the growth of towns separated by forest preserves particularly along County borders.

While both of these facts can be desirable from an environmental protection and regional growth management standpoint, this development pattern has significant consequences for administration of the CMAQ program and its project selection criteria. That is because the CMAQ project selection criteria are heavily weighted by population density factors.

The case of this year's application for I-355 Corridor Trail is an excellent illustration of this difficulty and why modifications to the program should be considered. The recommended program for 2008 excludes funding for a very worthwhile project submitted by Will County Forest Preserve District (BP12082888). This application covers the northern segment of an 11-mile trail that will link Cook, DuPage and Will Counties. Will County FPD's application would construct a 4.5 mile trail parallel to I-355 connecting the Southern DuPage County Regional Trail (46 miles) and the Village of Woodridge and Woodridge Park District bikeway system, together with the Centennial Trail, the I&M Canal Trail, and the Village of Lemont bikeway system. The route is largely forest preserves and open space as the steep grades and river valleys have restricted development (e.g., the Desplaines River, I&M Canal, and Sanitary and Ship Canal).

An unprecedented intergovernmental subregional planning effort has laid the groundwork for this application. A bicycle and pedestrian planning advisory group established by the Illinois State Toll Highway Authority has been working for approximately 3 years to develop a conceptual route for this trail parallel to I-355. Representatives include both governmental agency and bikeway/pedestrian interest groups on the local, county and regional level. Key accomplishments include:

- Development of a conceptual route
- Intergovernmental support secured with governing board resolutions from approximately 13 municipal and park district agencies across 3 counties and spanning 3 forest preserve districts
- 25% preliminary engineering plans completed, land secured, and preliminary grading underway
- Exceptional cooperation and support from the Illinois Tollway Authority including engineering, land, and a donation to Will County Forest Preserve District of the haul bridge below that will remain for use as a trail bridge



Due to the unique location, the I-355 Corridor Trail project ranked low due to low area population. However, the project has the ability to improve access for an estimated 1.5 million DuPage, Will and Cook County residents (and an additional 600,000 residents expected to enter the area by 2010).

On the regional level, we cannot create an effective non-motorized transportation network without addressing regional barriers that separate counties such as the significant river valleys crossed in this trail project.

The inability of this truly exceptional regional project to compete effectively under the current program was raised at the last CMAP Bicycle and Pedestrian Task Force. There was a consensus among the task force members that the issue merited further discussion although it was difficult to discuss revision of the criteria during the project selection process.

This letter is requesting the CMAQ Program re-examine its program guidelines and project ranking criteria to allow projects located within areas of low population density to compete effectively if they span more than one county and directly link major regional trails serving larger populations centers in the surrounding area.

Thank you for your time and consideration in this matter.

Sincerely,

A handwritten signature in black ink, appearing to read "Deborah Jan Fagan", with a stylized flourish at the end.

Deborah Jan Fagan, AICP
Chief Planner and County Trail System Coordinator

Ross Patronsky

From: Amy Talbot
Sent: Monday, August 20, 2007 4:46 PM
To: Ross Patronsky
Subject: Air Quality

jansrainforest@sbcglobal.net wrote:

Date: Thu, 16 Aug 2007 06:56:06 -0700 (PDT)

From: <jansrainforest@sbcglobal.net>

Subject: Air Improvement Ideas

To: info@cmap.illinois.gov

Hello, I read about the proposed program to improve our air quallity in Chicago. I live on a very busy street, Foster Avenue, so I really know how bad the pollution is. I think we should consider more bike lanes and islands between traffic lanes with seasonal plantings...at least more tree should be planted to absord some of this bad air and give us a good oxygen exchange. The planted center islands do slow down traffic. Most of them are beautiful and you just can't help but slow down to take a look. I also think more traffic cameras to take pictures of speeders would slow things down. CTA buses and trucks should be ticketed for polluting. OK enough, got to smell the roses.

Thanks,

Jan Madia

Chicago Resident

-----Original Message-----

From: bdaley@cityofchicago.org [<mailto:bdaley@cityofchicago.org>]

Sent: Sunday, August 26, 2007 6:15 AM

To: Info

Cc: Samantha Bingham; scarlson@cps.k12.il.us

Subject: CMAQ Comment

I am writing in support of grant application OT01082843, Chicago Public Schools School Bus Retrofit.

We have worked with the Chicago Public Schools in the past on projects retrofitting their school bus fleet. This work has been done through partnerships with Illinois Environmental Protection Agency and the United States Environmental Protection Agency. As a result, some new initiatives were implemented including anti-idling language in CPS's bus fleet contracts.

As one of the largest school systems in the nation, we feel it is important to continue this work through further retrofits.

We strongly encourage your favorable consideration of the above referenced grant applications.

Thank you.

Brendan Daley
Deputy Commissioner
Energy & Air Quality Division
Chicago Department of Environment
30 North LaSalle, Suite 2500
Chicago, Illinois 60602
phone 312-744-8901
fax 312-744-5272

August 28, 2007

The Illinois Campaign to Clean up Diesel Pollution, on behalf of itself and the undersigned organizations, hereby submits these public comments on the proposed Fiscal Year 2008 Congestion Mitigation and Air Quality (CMAQ) program.

The 2005 federal Safe, Accountable, Flexible, Efficient Transportation Equity Act states that "metropolitan planning organizations shall give priority in distributing funds received for congestion mitigation and air quality projects...to...diesel retrofits." It is our hope that the local planning organizations involved in distribution of Illinois' CMAQ funds recognize the importance and reasonableness of diesel retrofit projects, and maintain and expand on the approval of such projects.

The Chicagoland region is in dire need for diesel emission reduction projects. The U.S. Environmental Protection Agency has designated this region as a non-attainment area for fine particulate matter ("soot"), a major source of which is diesel exhaust. That means that most of the residents of Illinois live in areas with air that does not meet minimum federal health standards. This diesel soot is known to cause asthma attacks, heart attacks, lung cancer, and stroke. In fact, in Metropolitan Chicago alone, diesel soot exposure causes, on average, about 755 deaths every year. Our city ranks third in the national list of metropolitan areas with the gravest diesel impacts. (Visit <http://www.catf.us/projects/diesel/> and <http://www.cleanupdieselpollution.org> for more information).

Fortunately, there are simple, cost-effective solutions available to address this public health and environmental problem. Pollution control devices (such as diesel particulate filters, oxidation catalysts, and closed crankcase filtration systems) can nearly eliminate harmful soot emissions, and anti-idling controls (such as automatic stop/start and cold start devices) can limit unnecessary pollution and prevent wasted fuel. (Visit <http://www.epa.gov/otaq/retrofit/verif-list.htm> for more information)

Four of this year's applicants have recognized the need to reduce diesel emissions, and are looking for federal fiscal support of their efforts. The Village of Riverdale seeks to retrofit 8 locomotive switcher engines with anti-idling controls. The Chicago Transit Authority seeks to equip 250 buses with cold start devices that will reduce idling times in winter. The Chicago Department of Environment seeks to retrofit 114 refuse vehicles with diesel particulate filters and the Chicago Public School system plans to retrofit 425 school buses with diesel oxidation catalysts. These projects are all part of the proposed program, and we look forward to seeing these projects implemented.

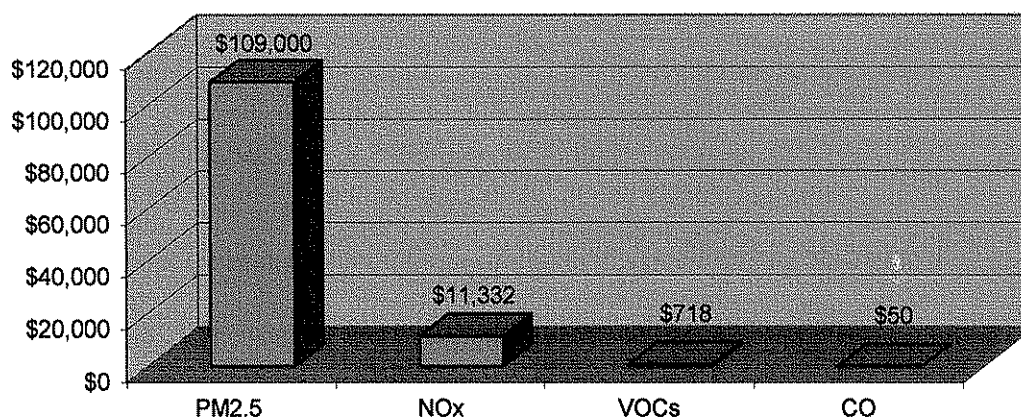
Not only do diesel retrofit projects dramatically benefit air quality, they are also simple and cost effective. While many CMAQ projects take multiple years to complete, sometimes requiring multiple years of CMAQ funding, diesel retrofit projects are a one-time expense that can be completed in just a couple of months. These simple projects are also extremely cost effective: the Chicago Public School project, referenced above, is the single most cost effective project included in the proposed program this year (\$38 per

kilo of VOC eliminated); even the least cost effective diesel retrofit project, the Village of Riverdale switcher engine retrofits at \$249/kiloVOC, is more cost effective than all but one other project included in the entire proposed program.

“From a cost effectiveness point of view, diesel retrofits are superior to almost all current CMAQ strategies, including ride-share programs, van-pool arrangements, HOV lanes, traffic signalization, bike paths, and all strategies that attempt to modify behavior (like encouraging teleworking.)” Robert F. Wescott, Ph.D., *Cleaning the Air: Comparing the Cost Effectiveness of Diesel Retrofits vs. Current CMAQ Projects*, An Analysis Prepared for the Emission Control Technology Association (May 11, 2005). (Document attached)

While Volatile Organic Compounds and Nitrogen oxides, the pollutants which CMAP staff currently focuses on in its CMAQ cost-efficiency analysis, are definitely relevant to air quality, fine particulate matter is, pound per pound, far more dangerous; in fact, the health costs caused by a ton of PM are 10 times that caused by NO_x and 150 times that caused by VOCs (see chart below). Diesel retrofit projects address PM pollution directly.

Health Costs per Ton, Urban Areas (Midpoint Estimate)



Source: McCubbin, Donald and Mark Delucchi (1999), *The Health Costs of Motor-Vehicle-Related Air Pollution*, *Journal of Transport Economics and Policy*, September, Vol. 33, Part 3, pp. 253-86.

We hope that prior to issuing funding for fiscal year 2009 you reconsider the necessity and benefits of diesel retrofit projects, and allocate more funding to these worthy efforts.

Thank you for your consideration. If you have any questions, please feel free to contact me.

Respectfully,

Anna Frostic, Esq.
Environmental Health Advocate
Illinois Campaign to Clean up Diesel Pollution
Respiratory Health Association of Metropolitan Chicago
1440 W Washington, Chicago, IL 60607
afrostic@lungchicago.org (312) 628-0202

The following organizations sign on in support of these comments:

Citizen Action – Illinois

Cecile Carroll

Organizer

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**Cleaning the Air:
Comparing the Cost Effectiveness of
Diesel Retrofits vs. Current CMAQ Projects**

An Analysis Prepared for the Emission Control Technology Association

**by Robert F. Wescott, Ph.D.
Economic Consultant
Washington, DC**

May 11, 2005

Robert F. Wescott, Ph.D. is a Washington, DC-based economic consultant with 25 years of professional experience working on macroeconomic and industry/public policy issues. Dr. Wescott served as Special Assistant to the President for Economic Policy at the White House and as Chief Economist at the President's Council of Economic Advisers. From 1982-93 he was Chief Economist at Wharton Econometrics (WEFA Group), the private economic analysis firm, where he oversaw all economic modeling, forecasting, and consulting operations. Dr. Wescott also was an official in the Research Department of the International Monetary Fund where he did research on global economic risks and policy challenges. In 1990 he was research director at the International Center for the Study of East Asian Development in Kitakyushu, Japan. He holds a Ph.D. in Economics from the University of Pennsylvania, 1983.

Cleaning the Air: Comparing the Cost Effectiveness of Diesel Retrofits vs. Current CMAQ Projects

Executive Summary

- A key goal of U.S. air pollution programs, including the Congestion Mitigation and Air Quality (CMAQ) program created in 1990, has been to clean the air in cities to improve public health and lower medical costs. But while the CMAQ program has emphasized reductions of carbon monoxide, hydrocarbons, and ozone, recent research finds that the top air pollution problem in urban areas today is fine particulate matter, which is particles with a diameter of 2.5 micrometers or less (PM_{2.5}).
- This pollutant, PM_{2.5}, is a primary airborne threat to human health today costing more than \$100,000 per ton in health costs. Researchers estimate that PM_{2.5} is two to twenty times as harmful to human health as nitrous oxide, more than one hundred times as dangerous as ozone, and 2000 times as dangerous as carbon monoxide on a per ton basis.
- Diesel engine exhaust is a source of PM_{2.5} emissions in urban areas. Approximately one third of these diesel emissions are due to on-road vehicles and about two thirds are due to off-road equipment, such as construction equipment.
- Diesel retrofit technology is currently available that is highly effective at reducing PM_{2.5} emissions. Diesel oxidation catalysts (DOCs) are well suited for retrofitting older off-road vehicles and diesel particulate filters (DPFs) are highly efficient at reducing these pollutants where new low sulfur diesel fuels are available, as is already the case in most urban areas.
- From the point of view of cost effectiveness, diesel retrofits are superior to almost all current CMAQ strategies, including ride-share programs, van-pool arrangements, HOV lanes, traffic signalization, bike paths, and all strategies that attempt to modify behavior (like encouraging telecommuting.) Most of these CMAQ strategies cost \$20,000 to \$100,000 per ton equivalent of pollutant removed, and some cost as much as \$250,000 per ton removed.
- Under conservative assumptions, diesel retrofits cost only \$5,340 per ton equivalent of pollutant removed. In fact, among all CMAQ strategies, only emission inspection programs appear to exceed the cost effectiveness of diesel retrofits.
- Expanding the range of CMAQ projects to include diesel retrofits for construction equipment and off-road machinery in urban areas could be a highly effective way to spend public monies. More than 100 million Americans live in areas of the country where PM_{2.5} levels exceed the EPA's guidelines.

Background

Cleaning the air to improve human health and lower medical costs has been an objective of U.S. government policy since at least the Clean Air Act of 1970. Concerns about poor air quality, especially in urban areas, led to the creation of the Congestion Mitigation and Air Quality (CMAQ) Program in 1990, which has set aside a portion of transportation monies for the past 15 years to fund innovative projects to reduce carbon monoxide, hydrocarbons, nitrous oxides, and smog in so-called non-attainment areas.¹ Vehicle emission inspection programs, high-occupancy vehicle (HOV) travel lanes, van pool programs, park-and-ride lots, and bike paths are examples of CMAQ projects.

There has been significant progress in the past 35 years in reducing carbon monoxide and hydrocarbon emissions and smog. Scientists, however, have been able to identify new airborne health risks whose costs are now becoming more fully appreciated. Notably, particulate matter (PM) has been found to have especially pernicious health effects in urban areas. Increasingly it is becoming understood that diesel engine emissions in urban areas, both from on-road trucks and buses and from off-road construction and other equipment, are a significant source of fine particulate matter pollution. This leads to a number of questions:

- What is the current assessment of the top health risks from air pollution from mobile sources in urban areas?
- What is the role of emissions from diesel engines?
- How does diesel retrofit technology to clean engine emissions after combustion compare with current CMAQ projects in terms of cost effectiveness?
- Are CMAQ funds currently being deployed in the most cost effective manner possible?

This paper examines these questions by reviewing the recent scientific, environmental, economic, and health policy literature.

The Health Costs of Air Pollution

In the 1960s and 1970s the key health risks from air pollution were deemed to come from carbon monoxide, hydrocarbons (or volatile organic compounds, VOCs), nitrous oxides (NO_x), and smog, and early clean air legislation naturally targeted these pollutants.² During the past ten years or so, however, researchers have identified new pollutants from mobile sources that have particularly harmful health effects, especially in urban areas. Top concern today centers around particulate matter, and especially on fine particulate

¹ The EPA has formal criteria for the definition of non-attainment areas, but generally these are the large U.S. cities.

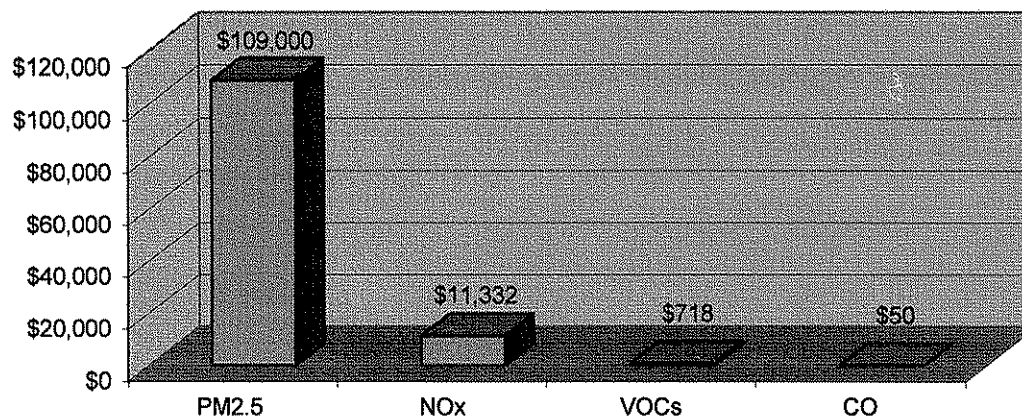
² Catalytic converters installed on all cars since the mid 1970s, for example, have targeted these pollutants.

matter. Fine particulates, with a diameter of less than 2.5 micrometers (PM_{2.5}), can get trapped in the lungs and can cause a variety of respiratory ailments similar to those caused by coal dust in coal miners. A significant portion of PM_{2.5} emissions in urban areas come from off-road diesel equipment. According to analysis by the California Air Resources Board, on-road engines account for about 27% of PM emissions in California and off-road equipment is responsible for about 66% of PM emissions.³

Analysis by Donald McCubbin and Mark Delucchi published in the *Journal of Transport Economics and Policy* evaluates the health costs of a kilogram of various air pollutants, including CO, NO_x, PM_{2.5}, sulfur oxides (SO_x), and VOCs.⁴ These researchers estimate health costs from such factors as, hospitalization, chronic illness, asthma attacks, and loss work days for the U.S. as a whole, for urban areas, and for the Los Angeles basin. For urban areas, they find the range of health costs per kilogram of CO was from \$0.01 to \$0.10, NO_x was from \$1.59 to \$23.34, PM_{2.5} was from \$14.81 to \$225.36, SO_x was from \$9.62 to \$90.94, and VOCs was from \$0.13 to \$1.45. Taking the mid-points of these estimates, a kilogram of PM_{2.5} therefore was nearly 10 times more costly from a health point of view than a kilogram of NO_x, more than 150 times more costly than a kilogram of VOCs, and more than 2000 times more costly than a kilogram of CO. On a per ton basis, a ton of PM_{2.5} causes \$109,000 of health costs, a ton of NO_x costs \$11,332, a ton of VOCs costs \$718, and a ton of CO costs \$50 (Chart 1).

Chart 1

Health Costs per Ton, Urban Areas (Midpoint Estimate)



Source: McCubbin and Delucchi (1999)

³ *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-Fueled Engines and Vehicles*, California EPA Air Resources Board, October 2000, p. 1.

⁴ McCubbin, Donald and Mark Delucchi (1999), *The Health Costs of Motor-Vehicle-Related Air Pollution*, *Journal of Transport Economics and Policy*, September, Vol. 33, Part 3, pp. 253-86.

Effectiveness of Diesel Retrofit Filters

Given the high health costs of PM_{2.5}, significant effort has gone into the development of technological solutions to deal with the problem. The best technologies involve the use of post-combustion filters with a catalyzing agent, which together trap and break down dangerous pollutants before they are emitted into the air. All new diesel trucks will be required to use these technologies by 2007 according to U.S. EPA rules, and off-road equipment will have to use these technologies by 2010. (Rules require 95% reductions in emissions of several pollutants, as well as a 97% cut in the sulfur levels in diesel fuel.)⁵ However, given that the lifespan of a diesel engine can be 20-30 years, it will take decades to completely turn over America's diesel fleet. Therefore, by lowering emissions from older diesels, retrofits are an effective path to cleaner air over the next few decades.

Diesel retrofit filters are highly effective at their chief function: preventing dangerous pollutants from ever entering the air. Diesel oxidation catalysts (DOCs), at \$1,000 to \$1,200 per retrofit, reduce PM by about 30% and can work with current higher sulfur diesel fuels. This yields a large benefit when installed on older, higher-polluting vehicles. In addition to their PM reducing capabilities, these filters also can cut the emission of carbon monoxide and volatile hydrocarbons by more than 70%.

Diesel particulate filters (DPFs), which generally cost \$4,000-\$7,000 per engine, are far more efficient. They are specifically targeted at keeping more dangerous PM out of the air than are DOCs. In fact, they can reduce PM_{2.5} pollution from each vehicle by more than 90%, yielding an enormous cut in emissions over the life of the diesel engine, even when installed on newer, cleaner diesel vehicles. An additional requirement of DPFs, however, is that the vehicle must run on newer very low sulfur fuels. High sulfur fuel leads to sulfate emissions from the filter due to the very active catalysts needed to make the filters function properly. Thus, DPFs are most effective as a solution for vehicles in urban areas—such as construction equipment and urban fleets—where very low sulfur fuels are already available.⁶

These technologies are not new or experimental; they are already in use around the world. There are 2 million of these two technologies already at work in heavy-duty diesel vehicles worldwide. Further, there are 36 million DOCs and 2 million DPFs in use on passenger vehicles in Europe alone, where these technologies are currently being used, reaping cost-effective health benefits over the long term.

The CMAQ Program

The CMAQ program is the only federally funded transportation program chiefly aimed at reducing air pollution.⁷ Its historical purpose has been twofold: to reduce traffic

⁵ "EPA Dramatically Reduces Pollution from Heavy-Duty Trucks and Buses, Cuts Sulfur Levels in Diesel Fuel," *Environmental News*, EPA, 12/21/00

⁶ Very low sulfur diesel fuel will be available nationwide by 2006.

⁷ Transportation Research Board of the National Research Council: *The Congestion Mitigation and Air Quality Improvement Program: Assessing 10 Years of Experience* (2002) p.1.

congestion and to fund programs that clean up the air Americans breathe. Within its air quality mission, it is designed primarily to help non-attainment areas (mainly polluted urban zones) reach attainment for air quality standards under the Clean Air Act.⁸ Historically many CMAQ projects have tried to change travel and traffic behavior in order to achieve its goals. These transportation control measures (TCMs) have been designed both to reduce traffic congestion as well as improve air quality. An example is a bicycle path. Designed to reduce the number of drivers on the road, bike paths could, in theory, achieve both goals. Further examples are vanpools, ridesharing and park and ride programs, and HOV lanes: all current CMAQ projects. Other projects have addressed emission reductions directly, as for example, through funding for state automobile emission inspection programs.

As a condition for reauthorizing the CMAQ program in 1998, the U.S. Congress required that a detailed 10-year assessment of the program be conducted. This review was performed by the Transportation Research Board of the National Research Council and was completed in 2002. This review found that CMAQ has been less than successful in reducing congestion and suggested that the most beneficial way for CMAQ to use its funds is to focus on air quality.⁹ It also found that TCMs were less cost effective than measures to directly reduce emissions, such as through inspection programs.

Furthermore, the study suggested that CMAQ's focus within the domain of air quality is misplaced. CMAQ programs have targeted the gases considered the most dangerous pollutants for many years, like hydrocarbons, carbon monoxide, and nitrous oxides. While these gases pose recognized health and environmental risks, recent work has shown that the dangers of these substances pale in comparison to the danger of fine particulate matter.¹⁰ In the words of the study, "Much remains to be done to reduce diesel emissions, especially particulates, and this could well become a more important focus area for the CMAQ program."¹¹ Further, discussing the fact that diesel-related CMAQ programs could be the most cost-effective, the study states, "had data been available on particulate reductions... the ranking of strategies focused on particulate emissions... would likely have shown more promising cost-effectiveness results."¹²

Comparing the Cost Effectiveness of Diesel Retrofits with Other CMAQ Projects

Given that PM_{2.5} emissions from diesel engines are a leading health concern, that effective technology exists today to clean the emissions of off-road diesel equipment used extensively in the middle of American cities (non-attainment areas), and that the CMAQ 10-year review highlights the possible use of CMAQ funds for diesel retrofit projects, it is logical to compare the cost effectiveness of these diesel retrofits with current CMAQ projects. *The CMAQ Program: Assessing 10 Years Experience* (2002) estimates the median cost per ton of pollutant removed for 19 different CMAQ strategies and these

⁸ *ibid*, p.1

⁹ *ibid*, p.13

¹⁰ *ibid*, p.13

¹¹ *ibid*, p.74

¹² *ibid*, p.131

estimates provide the comparison base. Published estimates for diesel retrofits are compared with these estimates.

As a first step in comparing the cost effectiveness of pollution reduction strategies, it must be noted that the CMAQ cost effectiveness estimates are presented as “cost per ton equivalent removed from air,” with weights of 1 for VOCs, 4 for NO_x, but 0 for PM_{2.5}.¹³ Relying upon the McCubbin and Delucchi health cost estimates, however, even weighted NO_x should be considered more damaging than VOCs. That is, even though 0.25 ton (the 1:4 ratio above) of NO_x removed counts as the CMAQ equivalent of one ton of pollution removed, it has a higher health cost than a ton of VOCs (\$11,332 / 4 = \$2,883 for NO_x vs. \$718 for VOCs). As a second step, conservatively assume that all CMAQ projects remove the more damaging pollutant (NO_x). This still means that a ton of PM_{2.5} reduction would be worth at least 9.45 tons of regular CMAQ reductions (\$109,000 for PM_{2.5} / \$11,332 for NO_x).

Diesel retrofits are estimated to cost \$50,460 per ton of PM_{2.5} removed by the California Air Resources Board (CARB).¹⁴ This estimate is very conservative and substantially higher than that cited by industry sources. Using the CARB cost estimate, diesel retrofits cost \$5,340 per ton equivalent of air pollution removed (\$50,460 / 9.45), based upon the CMAQ definition of ton equivalent and on the conservative assumption that CMAQ projects remove the most damaging pollutant reviewed. If a less conservative and more realistic assumption is used – that CMAQ projects remove a mix of NO_x and VOCs – then the cost-effectiveness of diesel retrofits becomes substantially more favorable, and could be as low as \$332 per ton of CMAQ pollutant removed.

This analysis means that diesel retrofits for construction equipment are highly cost effective when compared with current CMAQ strategies. As shown in Table 1 and Chart 2, some CMAQ strategies cost more than \$250,000 per ton of pollutant removed (teleworking), and many are in the \$20,000 to \$100,000 per ton range (traffic signalization, park and ride lots, bike paths, new vehicles, etc.). The only current CMAQ project category that exceeds the cost effectiveness of diesel retrofits is emission inspection programs.

Other studies also conclude that diesel retrofits are highly cost effective compared with current CMAQ projects. The Diesel Technology Forum compared the benefits and costs of CMAQ projects with diesel retrofits for transit buses (for NO_x pollution reduction) and concluded that retrofits are a better use for CMAQ funds than any other typical CMAQ project, with the exception of inspection and maintenance programs and speed limit enforcement.¹⁵ Also, the California EPA’s Air Resources Board has estimated that diesel

¹³ Importantly, the study’s PM_{2.5} weight of 0 does not reflect PM_{2.5}’s health costs, but rather that fact that standards have not yet been set for it by the U.S. EPA. As the CMAQ 10-year review says, “PM_{2.5} is generally regarded as the pollutant with the most pernicious health consequences, though to date standards have not been promulgated for its regulation for both measurement and economic reasons.” (p. 295).

¹⁴ California Air Resources Board, “Staff Analysis of PM Emission Reductions and Cost-Effectiveness,” Sept. 6, 2002.

¹⁵ “The Benefits of Diesel Retrofits,” Diesel Technology Forum. See http://dieselforum.org/retrofit/why_ben.html.

retrofits have a benefit of between \$10 and \$20 for each \$1 of cost.¹⁶ And the U.S. EPA, in its justification for new on-road diesel rules in 2007 and off-road rules in 2010 estimates the benefits for diesel particulate filters at roughly \$24 for each \$1 of cost.¹⁷

**Table 1: Cost-Effectiveness of Current CMAQ Strategies
And Diesel Retrofits
(Median cost per ton equivalent of air pollution removed)**

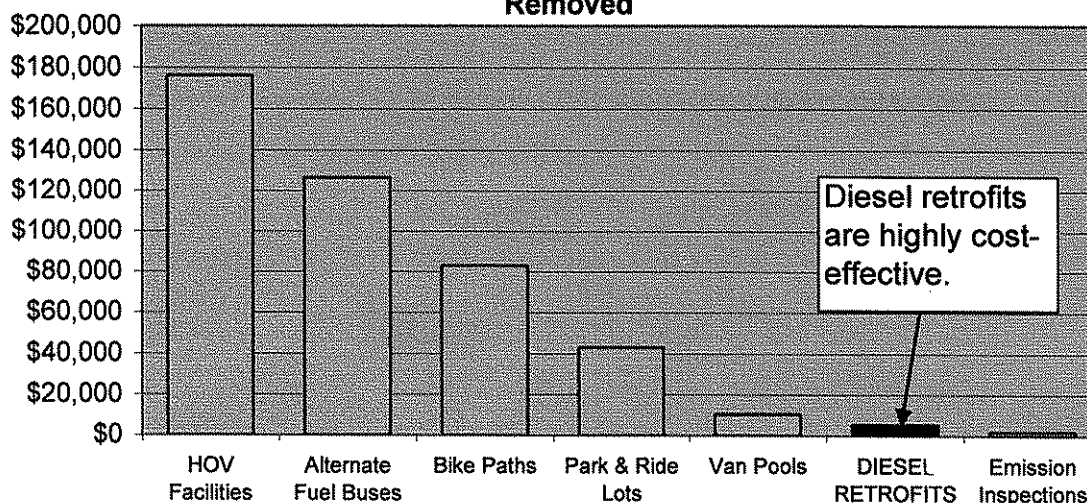
	Median Cost	Rank
Inspection and Maintenance	\$1,900	1
DIESEL RETROFITS	\$5,340	2
Regional Rideshares	\$7,400	3
Charges and Fees	\$10,300	4
Van Pool Programs	\$10,500	5
Misc. Travel Demand Management	\$12,500	6
Conventional Fuel Bus Replacement	\$16,100	7
Alternative Fuel Vehicles	\$17,800	8
Traffic Signalization	\$20,100	9
Employer Trip Reduction	\$22,700	10
Conventional Service Upgrades	\$24,600	11
Park and Ride Lots	\$43,000	12
Modal Subsidies and Vouchers	\$46,600	13
New Transit Capital Systems/Vehicles	\$66,400	14
Bike/Pedestrian	\$84,100	15
Shuttles/Feeders/Paratransit	\$87,500	16
Freeway Management	\$102,400	17
Alternative Fuel Buses	\$126,400	18
HOV Facilities	\$176,200	19
Telework	\$251,800	20

Source: All costs from *The CMAQ Improvement Program: Assessing 10 Years of Experience*, (2002), except diesel retrofit costs, which are from author's calculations.

¹⁶ "Perspectives on California's Diesel Retrofit Program," California EPA, Air Resources Board, presentation by C. Witherspoon, June 3, 2004.

¹⁷ See, for example, "2007 Heavy-Duty Highway Final Rule," U.S. EPA, May 2000, which can be found at <http://www.epa.gov/otaq/diesel.htm>.

Chart 2: Median Cost per Ton Equivalent of Air Pollution Removed



Conclusions

The top air pollution problem in U.S. urban areas today is almost certainly $PM_{2.5}$, which is estimated to cost more than \$100,000 per ton in health costs. A major source of $PM_{2.5}$ emissions in urban areas is diesel engine exhaust. Approximately one third of these diesel emissions are due to on-road vehicles and about two thirds are due to off-road equipment. Off-road equipment in urban areas is a particular problem, because it gives off exhaust at ground level, frequently near large groups of people.

Diesel retrofit technology is currently available that is highly effective at reducing $PM_{2.5}$ emissions. DOCs are well suited for retrofitting older off-road vehicles and DPFs are highly efficient at reducing these pollutants where new low sulfur diesel fuels are available, as is already the case in most urban areas.

From a cost effectiveness point of view, diesel retrofits are superior to almost all current CMAQ strategies, including ride-share programs, van-pool arrangements, HOV lanes, traffic signalization, bike paths, and all strategies that attempt to modify behavior (like encouraging teleworking.) Only emission inspection programs exceed the cost effectiveness of diesel retrofits based upon conservative assumptions. Expanding the range of CMAQ projects to include diesel retrofits for construction equipment and off-road machinery in urban areas could be a highly effective way to spend public monies.

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Memorandum

To: CMAQ Project Selection Committee
From: Doug Ferguson, Associate Planner
Subject: CMAQ Project Change Request
Date: August 30, 2007

Three sponsors have requested project changes. The net change in the federal amount programmed resulting from the requests is \$550,998. The sponsors' requests are attached.

Kane County DOT – Fabyan Pwy and Western Ave (TIP ID 09-05-0004)

The sponsor is requesting a cost increase for the subject project in the amount of \$365,838 federal. The project was originally programmed in FY 2005 for \$605,000 federal (\$757,000 total) for engineering and construction. The construction costs have come in higher than original estimates. The new total cost of the project is \$1,213,547.

The reasons for higher costs include the rising prices for fuel, wire and fiber cables and unanticipated items such as new signal poles, mast arms and foundations and temporary signals during construction. The intent was to use existing poles but they were found to be inadequate.

A reevaluation of the project's emissions cost/benefit ratio was conducted. The new total project cost would give the project a cost per ton of VOC eliminated of \$184,574. The project's rank among FY 2005 signal interconnect proposals would drop from 3rd to 9th, above six other signal interconnect projects that were approved for funding that year.

Recommendation to the CMAQ Project Selection Committee:

- **Consider approving the cost change for Fabyan Pwy and Western Ave (TIP ID 09-05-0004), increasing the programmed amount by \$365,838 federal from \$605,000 federal (\$757,000 total) to \$970,838 federal (\$1,213,547 total).**

Addison – Mill Rd Bridge Sidewalk Project (TIP ID 08-06-0052)

The sponsor is requesting a cost increase and a scope change for the subject project in the amount of \$185,160 federal. The project was originally included in the FY 2007 multi-year CMAQ program for \$15,640 federal for phase I engineering, in FY 2008 for \$15,640 for phase II engineering and in FY2009 for \$173,920 for construction, for a total of \$205,500 federal (\$256,500 total).

The costs have come in higher than original estimates because of unforeseen work to be done to the bridge where the sidewalk is to be installed. This was discovered during a meeting with the IDOT Bridge Section Group personnel. Also discovered was that the project can proceed as a categorical exclusion 1 without the need of a phase I study. The Village requests that the money programmed for phase II be released early and combined with phase I funds so they can start phase II early.

The new project costs are engineering phase II in FY 2007 for \$49,368 federal and construction in FY 2009 for \$340,992 federal, for a new total of \$390,360 federal (\$487,950 total).

A reevaluation of the project's emissions cost/benefit ratio was conducted. The new total project cost would give the project a cost per ton of VOC eliminated of \$960. The project's rank among FY 2007 pedestrian facility proposals would drop from 6th to 7th, dropping below one project that was not funded but above six other projects that were approved for funding that year.

Recommendation to the CMAQ Project Selection Committee:

- **Consider approving the cost change for Mill Rd Bridge Sidewalk Project (TIP ID 08-06-0052), increasing the programmed amount by \$185,160 federal from \$205,200 federal (\$256,500) to \$390,360 federal (\$487,950).**
- **Consider approving the scope change for Mill Rd Bridge Sidewalk Project (TIP ID 08-06-0052), allowing the release of funds programmed for phase I and II in FY2007 for phase II.**

Justice – IL 171/Archer Ave Sidewalk From Cork Dr to 71st St (TIP ID 06-02-0002)

The sponsor is requesting a scope change for the subject project that would omit part of the sidewalk from being built in front of a business, District Auto. District Auto has paved the entirety of their parking area in concrete after the original plans were prepared and approved.

Construction of the sidewalk is currently underway and the Village has submitted a change of plans to IDOT District 1. Photographs of the parking area are included with the cost change request letter.

Since the change in plans will not affect the contiguous nature of the sidewalk there will be no change in the emission benefits of the project.

Recommendation to the CMAQ Project Selection Committee:

- **Consider approving the scope change for IL 171/Archer Ave Sidewalk From Cork Dr to 71st St (TIP ID 06-02-0002), removing the portion of the sidewalk that runs in front of District Auto, STA.46+11 to STA.47+20.**

KANE COUNTY

DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer



41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

August 20, 2007

Mr. Ross Patronsky
Chief of CMAQ Program
Chicago Metropolitan Agency for Planning
233 South Wacker Drive, Suite 800
Chicago, IL 60606

RE: Fabyan Parkway Interconnect; Western Avenue to Kane/Dupage County Line
Request for Increase in CMAQ Funds
TIP ID Number 09-05-0004

Dear Mr. Patronsky:

The Kane County Division of Transportation (KDOT) was awarded \$605,000 in CMAQ funding for Fiscal Year 2005 for the engineering and construction of the above referenced signal interconnect improvement. KDOT is requesting \$365,838 in additional CMAQ funds for the completion of the project, for a new total of \$970,838 of CMAQ funds.

In 2004, the estimated total cost for engineering and construction was \$757,000. This original estimate was very preliminary, and since that time, several factors have contributed to cost increases, including the rising price for fuel, wire and fiber. The design process has also revealed several items that were unforeseen. Thus, the revised estimated total cost for engineering and construction is \$1,213,547. (See Exhibit A attached.)

Due to budgetary restrictions, it will be difficult for KDOT to proceed to construction without additional CMAQ funds. The Fabyan Parkway Interconnect is an important capacity and safety improvement to a Strategic Regional Arterial, and we encourage the CMAQ Committee to support our request for additional funds.

If you have any questions or require additional information, please contact me at 630-406-7333.

Best Regards,

A handwritten signature in dark ink, appearing to read "Paul Holcomb", is written over a horizontal line.

Paul Holcomb
Chief of Design

Cc: file
Steve Coffinbargar
Holly Smith
Enclosures

**Fabyan Parkway Interconnect
Western Avenue to Dupage County Line**

Original Project Costs per January 30, 2004 CMAQ Application

Task	Total	CMAQ (80%)	KDOT (20%)
Phase II Engineering	\$60,560.00	\$48,400.00	\$12,160.00
Phase III Engineering	\$75,700.00	\$60,500.00	\$15,200.00
Construction	\$620,740.00	\$496,100.00	\$124,640.00
Total	\$757,000.00	\$605,000.00	\$152,000.00

Revised Project costs

Task	Total	CMAQ (80%)	KDOT (20%)
Phase II Engineering	\$69,401.00	\$55,520.80	\$13,880.20
Phase III Engineering	\$104,013.35	\$83,210.68	\$20,802.67
Construction	\$1,040,133.45	\$832,106.76	\$208,026.69
Total	\$1,213,547.80	\$970,838.24	\$242,709.56

Additional CMAP funds requested

\$365,838.24

Chicago Metropolitan Agency for Planning

CMAQ Cost Increase Analysis

TIP ID: 09-05-0004

Description: Fabyan Pwy and Western Ave

Ranking Computation

	2005 Award	2007 Increase
Tons VOC eliminated	6.5748	6.5748
Cost	\$ 757,000	\$ 1,213,547
\$/Ton VOC eliminated	\$ 115,136	\$ 184,574
Rank	3	9

Project Expenses

	Federal Share	Total	Fed %	Basis
2005 Award	\$ 605,000	\$ 757,000	79.9%	Approved project
2007 Increase	\$ 970,838	\$ 1,213,547	80.0%	Letter from Sponsor
Increase Amount	\$ 365,838	\$ 456,547		

Chicago Metropolitan Agency for Planning

TIP Division

Reranking of project 09-05-0004-Fabryan Pwy and Western Ave

ID	Signal Interconnect	Facility to be Improved	FY 2005 CMAQ Program			
			Total \$	Fed \$	\$/Ton Voc	Select
SI12052493	Bolingbrook-Boughton Rd from Woodward Ave to Kings Rd		\$922,000	\$738,000	\$60,209	\$738,000
SI12052494	Bolingbrook-Weber Rd from Lily Cache Ln to Commercial Entrance		\$235,000	\$188,000	\$63,158	\$188,000
SI09052414	Kane County DOT-Fabryan Pwy and Western Ave		\$757,000	\$605,000	\$115,136	\$605,000
SI09052311	Aurora-IL 31/Lake St from Indian Trail Rd to Gale St		\$603,360	\$482,688	\$122,082	\$482,688
SI09052450	IDOT-IL 31/Lincoln Way from IL 56/State St to Lovedale Rd		\$425,000	\$340,000	\$140,245	\$340,000
SI09052312	Aurora-Galena Biv from Orchard Rd to Locust St		\$653,400	\$522,720	\$169,772	\$522,720
SI02052457	IDOT-IL 43/Waukegan Rd from Beckwith Rd to US 14/Caldwell Ave		\$435,000	\$348,000	\$172,249	\$348,000
SI10052458	IDOT-US 12/Rand Rd from Sayton Rd to Grand Ave		\$95,000	\$76,000	\$174,040	\$76,000
SI10052455	IDOT-IL 132/Grand Ave from IL 83/Milwaukee Ave to Sand Lake Rd		\$470,000	\$376,000	\$181,256	\$376,000
2007 revised rank places project here					\$184,574	
SI10052454	IDOT-IL 176/Park Ave from St. Mary's Rd to Bradley Rd		\$195,500	\$156,400	\$214,363	\$156,400
SI09052313	Aurora-IL 25/Broadway Ave from Illinois Ave to Benton St		\$498,480	\$398,784	\$236,545	
SI10052473	Waukegan-IL 132/Grand Ave from IL 131/Green Bay Rd to IL 137/Sheridan Rd		\$1,600,000	\$1,280,000	\$257,823	
SI01052466	CDOT-Stony Island Ave from Midway Plaisance to US 12/US 20/95th St		\$440,000	\$352,000	\$267,716	
SI01052482	CDOT-87th St from Western Ave to I-94/Dan Ryan Ewy		\$3,345,000	\$2,676,000	\$289,433	\$1,338,000
SI10052474	Waukegan-Lewis Ave from 14th St to Yorkhouse Rd		\$2,500,000	\$2,000,000	\$307,934	
SI01052470	CDOT-Broadway Ave and Sheridan Rd from Devon Ave to Hollywood Ave		\$365,000	\$292,000	\$332,611	\$292,000
SI10052315	North Chicago-IL 137/Buckley Rd from IL 43/Waukegan Rd to IL 137/Sheridan Rd		\$1,602,000	\$1,282,000	\$373,839	
SI01052485	CDOT-Cicero Ave from US 14/Peterson Ave to Lexington Ave		\$8,525,000	\$6,820,000	\$389,102	
SI06052320	Crestwood-Calumet Sag Rd from IL 50/Cicero Ave to 135th St		\$201,000	\$161,000	\$394,574	
SI01052486	CDOT-US 12/US 20/95th St from Western Ave to US 41/Ewing Ave		\$8,650,000	\$6,920,000	\$444,145	\$3,460,000
SI01052472	CDOT-Roosevelt Rd from Western Ave to US 41/Lake Shore Dr		\$430,000	\$344,000	\$454,216	\$344,000
SI10052475	Waukegan-Washington St from IL 131/Green Bay Rd to IL 137/Sheridan Rd		\$1,600,000	\$1,280,000	\$479,401	\$640,000
SI01052463	CDOT-New US 41 from 79th St to 92nd St		\$3,620,000	\$2,896,000	\$538,447	
SI01052480	CDOT-IL 64/North Ave from Menard St to Ashland Ave		\$725,000	\$580,000	\$557,247	
SI01052468	CDOT-87th St from I-94/Dan Ryan Ewy to I-90/Chicago Skyway		\$320,000	\$256,000	\$587,286	
SI07052478	IDOT-IL 83/147th St from Homan Ave to Western Ave		\$1,585,000	\$1,268,000	\$667,816	
SI01052461	CDOT-79th St from IL 50/Cicero Ave to Ashland Ave		\$455,000	\$364,000	\$716,687	
SI07052476	IDOT-IL 50/Cicero Ave from 167th St to Fieldcrest Dr		\$234,000	\$187,200	\$880,313	
SI07052479	IDOT-142nd St/Main St from Indiana Ave to Cottage Grove		\$1,062,000	\$849,600	\$964,082	
SI01052459	CDOT-Michigan Ave and Indiana Ave from 31st St to 63rd St		\$740,000	\$592,000	\$1,354,400	



Village of Addison

COMMUNITY DEVELOPMENT DEPARTMENT

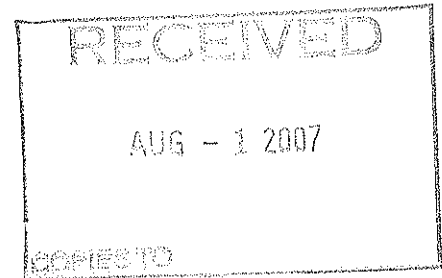
BUILDING • CODE ENFORCEMENT • ENGINEERING • ZONING

July 30, 2007

Mr. Ross Patronsky, Chief of the CMAQ Program
Chicago Area Transportation Study
233 South Wacker Drive, Suite 800
Chicago, IL 60606

Subject: Mill Road Bridge Sidewalk Project, TIP: 08-06-0052
Village of Addison (Du Page County)

File: 63.91



Dear Mr. Patronsky:

We are requesting the CMAQ Project Selection Committee for an increase in funding relative to the above-mentioned project in the amount of \$185,160. The increases were unforeseen because the project entailed more work to be done on the bridge where the proposed sidewalk is to be installed. This determination was done after meeting with the Illinois Department of Transportation (IDOT) and follow-up with the IDOT Bridge Section Group personnel.

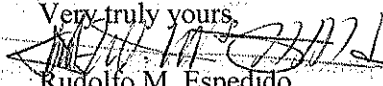
The reasons for the cost increases as shown on the attachments are as follows:

1. Phase II Engineering- The proposal of Civiltech Engineering to perform this task was \$61,710 (including a 10% contingency). The increase is associated with the Bridge Work.
2. Construction- Attached is the latest estimate by Civiltech Engineering totaling to \$384,000 (including a 20% contingency). The cost estimate includes the bridge work necessary for the sidewalk installation.
3. Phase III Engineering- Due to the increase in construction cost, we estimate this task at \$42,240 (including a 20% contingency).

Since this project is a multi-year project, it is also requested that the Phase 2-Design funding be released so that Phase 2 can start early or authorize the already released Phase 1 funding to be used for the Phase 2 design. Our meeting with IDOT indicates that this project can proceed as a categorical exclusion 1 without the need of a Phase 1 study.

I hope the above stated reasons would merit a positive review by the Project Selection Committee and I appreciate their efforts in considering this request. This process will preclude us from reapplying on the next funding cycle for these additional costs. Please give me a call at (630) 693-7533, if you have any questions. Thank you.

Very truly yours,


Rudolfo M. Espedido
Village Engineer

ONE FRIENDSHIP PLAZA Addison, Illinois 60101 TEL. (630) 543-4100 FAX (630) 543-3967

www.AddisonAdvantage.org

Mill Road Bridge Sidewalk Project

TIP ID: 08-06-0052

Location: Addison, Du Page County, Illinois

CMAQ Financing Summary

Approved Funding

Proposed Funding Increase

		Total Cost	Federal Cost	Total Cost	Federal Cost
1	Phase 1 Engineering*	\$19,550.00	\$15,640.00	\$0.00	\$0.00
2	Phase 2 Engineering**	\$19,550.00	\$15,640.00	\$61,710.00	\$49,368.00
4	Construction***	\$195,894.00	\$156,715.00	\$384,000.00	\$307,200.00
5	Phase 3 Engineering	\$21,506.00	\$17,205.00	\$42,240.00	\$33,792.00
	Total	\$256,500.00	\$205,200.00	\$487,950.00	\$390,360.00
	SAY		\$205,200.00		\$390,360.00

REQUESTED CMAQ Funding Increase

\$185,160.00

NOTES:

- * 1. Illinois Dept. of Transportation (IDOT) informed us that this project can go as a categorical exclusion 1 and to proceed with Phase 2 Design.
- ** 2. Consultant's Proposal for Phase 2 Design plus 10% contingencies.
- *** 3. Bridge Work needs to be incorporated after follow-up with IDOT- New estimates includes bridge rehab due to concrete overlay of the bridge years after its' original construction. The increase is shown below:

	APPLICATION ESTIMATE	NEW ESTIMATE
CONSTRUCTION COSTS:		
Sidewalk Costs	\$195,894.00	\$200,000.00
Bridge Work	\$0.00	\$120,000.00
SUB-TOTAL	\$195,894.00	\$320,000.00
20% Contingencies	Included Above	\$64,000.00
TOTAL	\$195,894.00	\$384,000.00

Phase II Engineering Manhour Calculations
Professional Engineering Services Proposal
Mill Road Sidewalk Over I-290 - Eggerding Drive to Mary Jane Lane
Village of Addison, DuPage County, Illinois

Task No.	Task	Personnel & Hours										Total Hours	% of Hours	Labor Cost
		DH	PM	PE	DE	SSE	SE	Design Tech	QC/ QA					
1	Data Collection and Early Coordination	\$54.00	\$38.00	\$32.00	\$26.25	\$55.00	\$34.50	\$30.00	\$55.00			19	4.1%	\$ 617.50
		0	5	4	8	1	1	0	0					
2	Plans, Special Provisions and Estimates											425	92.2%	\$ 14,292.50
		9	31	49	52	30	89	164	1					
3	Project Administration, Coordination and Permits											17	3.7%	\$ 735.50
		4	6	1	0	3	1	2	0					
	Total Cost													\$ 15,846
	Multiplier*	2.91												\$ 45,928
	Direct Costs and Sub Consultant Expense (See attached calculation)													\$ 10,507
	*Multiplier											461	100.0%	\$ 56,036
	Total Engineering Cost:													\$ 56,036

1(Direct Labor) + OH + 0.145*(1 + OH)
IDOT Approved OH Rate = 153.86%

ENGINEERING FEE, Phase 2
No Contingency

Project Addison Acct. No. _____ Page _____ of _____
 Subject Str. 022-0109 Comptd. By DAH Date 5-1-07
 Detail Mill Street Bridge Revised By _____ Date _____

ITEM	QUANTITY	UNIT COST	COST
Remove ^{floor} Drains	12 ea	\$200	2400
Concrete Overlay Removal	196 sq-yd	25	4900
Drill & Grout Dowels	588 ea	25	14,700
Concrete Superstructure	66 c.y.	700	46,200
Reinforcement Bars (E)	11,430 lb	1.40	16,000
6" ϕ ^{floor} drain	12 ea	1000	12,000
Reconstruct Expansion Joint	107 ft	120	12,840

total 109,040

Preliminary Estimated Constr. Cost = use \$120,000

CIVILTECH ENGINEERING, INC.

Bridge Work
 No Contingency

Project ADDISEN Acct. No. _____ Page _____ of _____
 Subject EGGERTING DR TO MARY JANE LN Comptd. By RTM Date 5-7-07
 Detail MILL STREET BRIDGE Revised By _____ Date _____

CONSTRUCT SIDEWALK ON EITHER SIDE OF BRIDGE

APPROX. 2300 LEN. FT

ITEM	QUANTITY	UNIT COST	COST
PAVEMENT REMOVAL (2,300 x 10 FT THICK x 1/4)	2550 SQ YD	\$10 / SQ YD	\$25,500
EARTH EXCAVATION (2,300 x 10 FT x 1 FT x 1/2)	850 CU YD	\$20 / CU YD	\$17,000
GUARD RAIL REMOVAL AND REPLACEMENT (APPROX. 600 FT)	600 FT	\$30 / FT	\$18,000
CONC. CONC. CURB & GUTTER, TYPE B+G.12 (2300 x 3 FT x 11.2 x 6 x 1/2000 x 1/4)	2300 FT	\$16 / FT	\$36,800
BET. STABILIZED SHALR @ GUARDRAIL	200 TONS	\$75 / TON	\$14,300
FURNISHED EXCAVATION / PEOPLE FURNISH & PLACE 4"	500 CU YD	\$20 / CU YD	\$10,000
SPODDING (2300 x 2 FT x 1/4)	500 SQ YD	\$2.50 / SQ YD	\$1,250
SIDEWALK 5" w/ 2" AGG. BASE (2300 x 5 FT)	11,500 SQ FT	\$5.00 / SQ FT	\$57,500
DRAINAGE STRUCTURES, STORM SEWERS & OUTFALLS	L. SUM	\$20,000	\$20,000

TOTAL = \$200,350

PRELIMINARY ESTIMATED CONST. COST => USE \$200,000

CIVILTECH ENGINEERING, INC.

SIDEWALK WORK
No Contingency

Chicago Metropolitan Agency for Planning

CMAQ Cost Increase Analysis

TIP ID: 08-06-0052

Description: Mill Rd Bridge Sidewalk Project

Ranking Computation

	2007 Award	2007 Increase
Tons VOC eliminated	508.3045	508.3045
Cost	\$ 256,500	\$ 487,950
\$/Ton VOC eliminated	\$ 505	\$ 960
Rank	6	7

Project Expenses

	Federal Share	Total	Fed %	Basis
2007 Award	\$ 205,200	\$ 256,500	80.0%	Approved project
2007 Increase	\$ 390,360	\$ 487,950	80.0%	Letter from Sponsor
Increase Amount	\$ 185,160	\$ 231,450		

Chicago Metropolitan Agency for Planning

TIP Division

Reranking of project 08-06-0052-Mill Rd Bridge Sidewalk Project

FY 2007 CMAQ Program					
ID	Facility to be Improved	\$/Ton Voc	FY2007	FY2008	FY2009
Pedestrian Facility					
BP04072693	Oak Park-Various Sidewalk Projects throughout Oak Park	\$18	\$226,030	\$226,029	
BP04072688	Harwood Heights-Union Ridge Elementary School - Pedestrian Facility Improvement Pl.	\$23	\$82,400		
BP03072691	Des Plaines-Mount Prospect Rd & Wolf Rd Sidewalks	\$147	\$24,000	\$160,000	
BP08072703	Westmont-2007 Miscellaneous Sidewalk Connectivity Part 3	\$272			
BP10072697	Mundelein-Lake St from Hawthorne Blv to Longwood Ter	\$484	\$245,784		
BP08072686	Addison-Mill Rd Bridge Sidewalk Project	\$505	\$15,640	\$15,640	\$173,920
BP06072696	Blue Island-Vermont St Corridor	\$945			
	2007 revised rank places the project here	\$960			
BP07072699	Oak Forest-Oak Forest Sidewalks to Metra Station	\$1,022	\$13,600	\$508,000	
BP04072702	Northlake-Wolf Rd Sidewalks at Soffel Ave	\$1,513	\$28,000	\$24,000	\$264,000
BP02072785	Glenview-Wagner Rd from Winnetka Rd to East Lake Ave	\$1,605	\$225,800		
BP11072690	Crystal Lake-Erick St Sidewalks	\$1,754	\$69,000		
BP10072700	Deerfield-Deerfield Rd Sidewalk Improvements and Pedestrian Underpass	\$1,843	\$84,000	\$695,520	
BP08072701	Oakbrook Terrace-22nd St Sidewalk from IL 56/Butterfield Rd to IL 83/Kingery Highway	\$2,285	\$49,226	\$328,180	
BP05072698	Riverside-Burlington Northern Santa Fe Railroad Pedestrian Tunnel	\$5,072			
BP12072695	Plainfield-IL 59 Sidewalk Improvements	\$111,135			

Hoeffferle - Butler Engineering, Inc.

CONSULTING ENGINEERS • LAND SURVEYORS

July 27, 2007

Ross Patronsky
Chicago Area Transportation Study
300 West Adams St.
Chicago, IL 60606

Re: Archer Ave. Sidewalks
#07-702

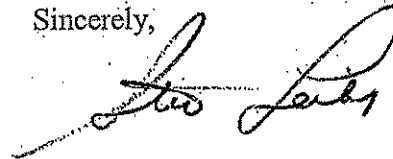
Dear Mr. Patronsky:

I am writing this letter in response to a letter I received from IDOT (see attached) concerning a CMAQ project currently under construction in the Village of Justice. This is the Archer Avenue sidewalk construction from Oak Grove to 71st Street. The letter I received was in response to a change in plans I sent to IDOT eliminating driveways and grass parkway areas in front of selected businesses on Archer. In addition to that, the Village also recommended eliminating a portion of sidewalk in front of District Auto (see attached plan). This was recommended because District Auto had paved their front parking area in concrete after the original plan had been prepared and approved.

Because the proposed omission of sidewalk in front of District Auto breaks the contiguous nature of the improvement, IDOT is requesting that the agency that handles the CMAQ funds give their approval to this change before they review the other changes. Please consider this letter as a formal request to approve the deletion of sidewalk from STA. 46+11 to STA. 47+20 on the plans for the reasons stated above. (I have enclosed two photographs of the site taken from each direction as you had requested.)

Please do not hesitate to call me if you need further information or have any questions concerning this matter.

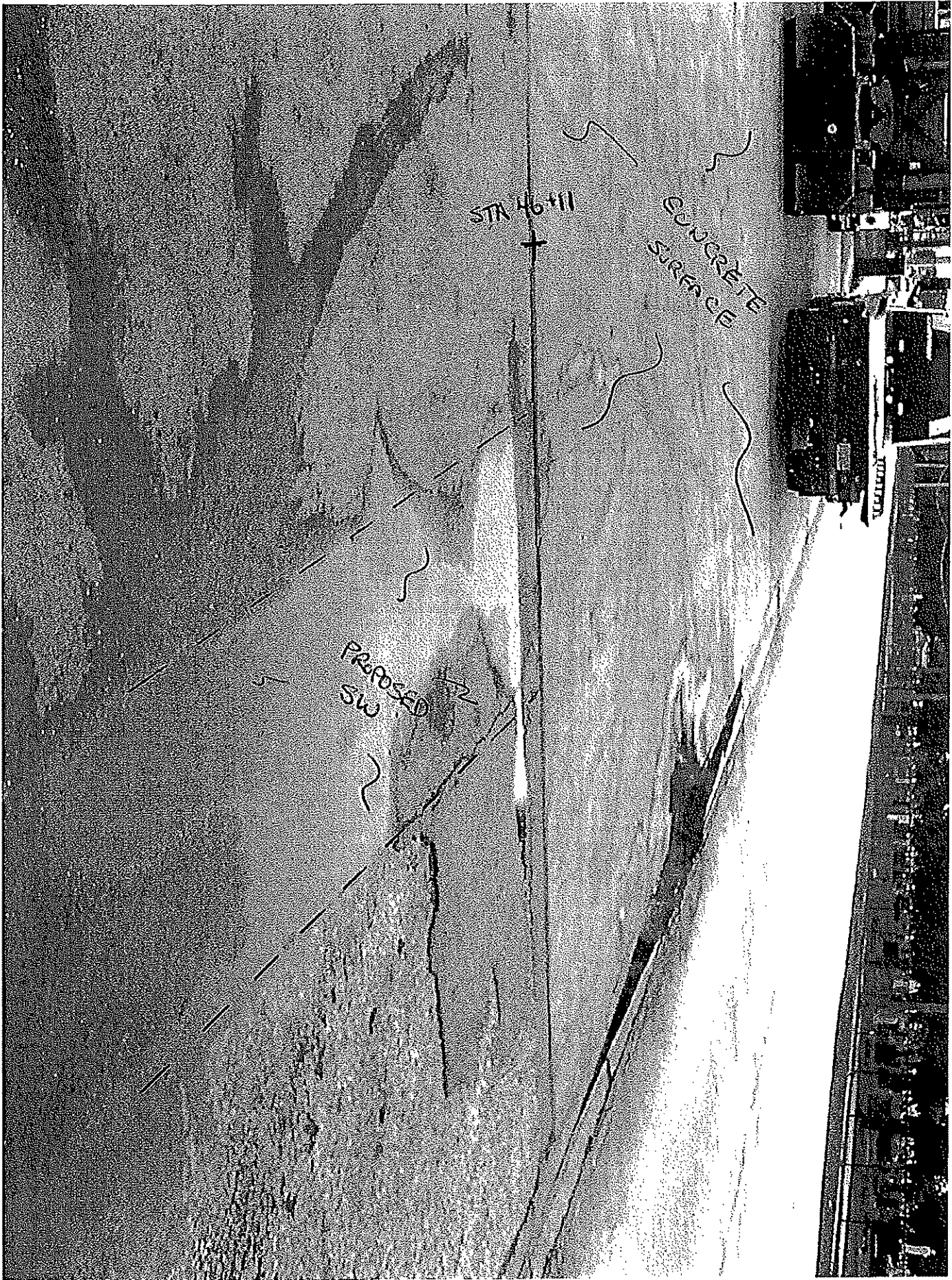
Sincerely,



Stephen A. Leiber, P.E.
Project Manager
HOEFFERLE-BUTLER ENGINEERING,
INC.

Enclosures (4)







Illinois Department of Transportation

Division of Highways/Region One / District One
201 West Center Court/Schaumburg, Illinois 60196-1096

PERMITS

Location: IL 171 (Archer Avenue) from 71st Street to Cork Street

Reference No : 016-40086

July 16, 2007

Mr. Stephen, A. Leiber, P.E.
Hoefflerle - Butler Engineering, Inc.
8714 South Roberts Road
Hickory Hills, IL 60457

RECEIVED
JUL 23 2007
HOEFFLERLE-BUTLER ENG., INC.

Dear Mr. Leiber:

We have completed a cursory review of your engineering drawings for the subject location. Please address the following:

- For our files, please provide auto-turn and on site vehicle circulation exhibits for the locations where the applicant is requesting changes to the previously approved plans. Please include parking layout striping exhibits. Clearly identify the right of way line.
- For the overall proposed changes and specific exception for sidewalk installation at station 46+11 to 47+20 (District Auto): CMAQ improvements require the construction of contiguous sidewalk. Approval for proposed changes may be obtained provided the applicant forward concurrence of said changes from the agency providing CMAQ funds.

Please revise your drawings/plans in accordance with the above comments and resubmit two (2) copies of your revised plans to continue the review process.

If you have any questions regarding this matter, please contact Mr. Carlos Muñoz Alba at (847) 705-4144.

Very truly yours,

Diane M. O'Keefe, P.E.
Deputy Director of Highways,
Region One Engineer

Stephen M. Travia, P.E.
Bureau Chief of Traffic